

ORIGINAL

CONFIDENTIAL

LOVE #1-19
API# 15-187-20672
DRILL STEM TESTS

DST #1: UPPER MORROW SAND
 4985-5003
 TIMES: 30-60-45-120
 RECOVERED 2,065' SW (12,200 CHL.) NO GAS
 IHP 24-38 IFP 360-619
 ISIP 1529 FFP 708-1025
 FSIP 1539 FHP 2418
 BHT 130°

DST #2: MISRUN

RELEASED

JUN 2 8 1995

FROM CONFIDENTIAL

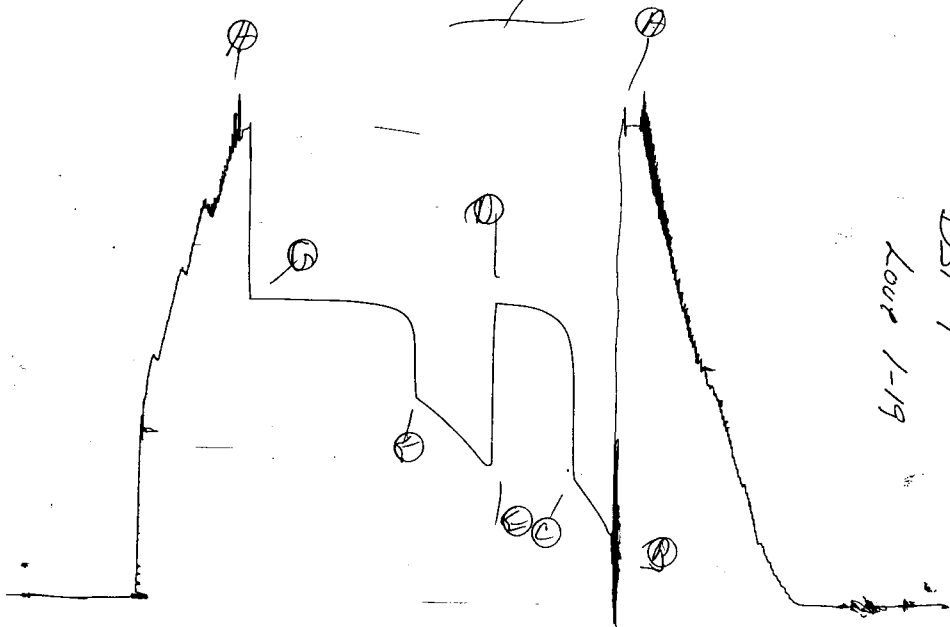
RECEIVED
STATE CORPORATION COMMISSION

MAY 19 1993

CONSERVATION DIVISION
Wichita, Kansas

KT 19008

I



DST #1

Lower 1-19

1562

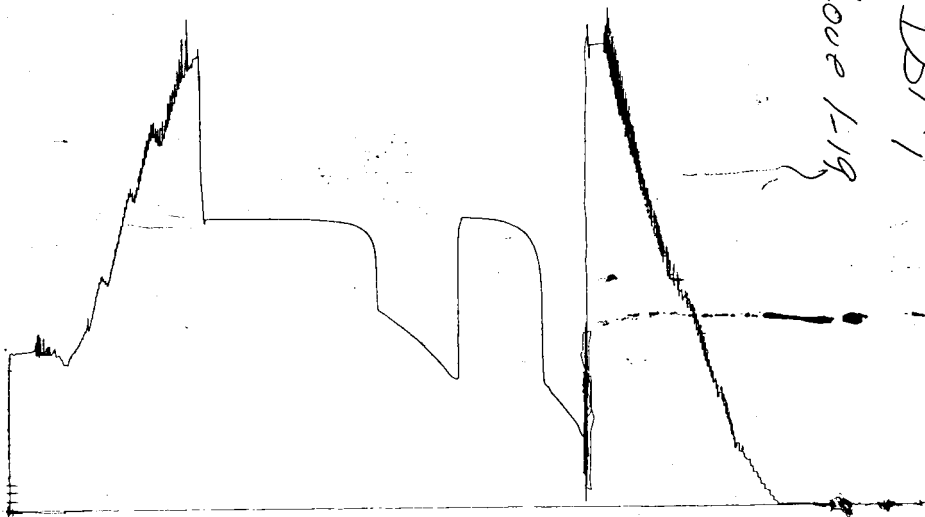
JKT 19008

0

DST#1

1427

Loc 1-19





WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No 19008

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201Elevation G.E. 3345 Formation Morrow Eff. Pay _____ Ft.District Garden City Date 4-19-93 Customer Order No. _____COMPANY NAME Hugton Energy Company CorpADDRESS 229 E. Williams Suite 500 Wichita KS, 67202LEASE AND WELL NO. Love 1-19 COUNTY Stanton STATE KS Sec. 19 Twp. 30 Rge. 40Mail Invoice To Same #1-19 Co. Name Same Address Same No. Copies Requested RegMail Charts To Same Address Same No. Copies Requested RegFormation Test No. 1 Interval Tested From 4985 ft. to 5003 ft. Total Depth 5003 ft.Packer Depth 4980 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.Packer Depth 4985 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4994 ft. Recorder Number 1562 Cap. 3900Bottom Recorder Depth (Outside) 4997 ft. Recorder Number 10242 Cap. 4100

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Martin # 21 Drill Collar Length 629 I. D. 2 1/4 in.Mud Type Chemical Viscosity 47 Weight Pipe Length _____ I. D. _____ in.Weight 9.1 Water Loss 7.6 cc. Drill Pipe Length 4326 I. D. 3.8 in.Chlorides 950 P.P.M. Test Tool Length 30' ft. Tool Size 5 1/2 od in.Jars: Make LTC Serial Number 405 Anchor Length 18' ft. Size 5 1/2 od in.Did Well Flow? _____ Reversed Out Yes Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.Main Hole Size 7 1/8 in. Tool Joint Size 4 1/2 KH in.Blow: Strong Blow, Bottom bucket In 2 min. F.F.P.Strong Blow, Bottom bucket In 4 min. F.F.P.Recovered 2065 ft. of Salt water

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Chlorides 122,000 P.P.M. Sample Jars used 3 Remarks (Total Fluid 2065')Time On Location 11:00 A.M. Time Pick Up Tool 12:00 P.M. Time Off Location _____ A.M.Time Set Packer(s) 2:58 A.M. Time Started Off Bottom 7:28 A.M. Maximum Temperature 130°FInitial Hydrostatic Pressure _____ (A) 2438 P.S.I.Initial Flow Period _____ Minutes 30 (B) 360 P.S.I. to (C) 619 P.S.I.Initial Closed In Period _____ Minutes 60 (D) 1529 P.S.I.Final Flow Period _____ Minutes 60 (E) 708 P.S.I. to (F) 1025 P.S.I.Final Closed In Period _____ Minutes 120 (G) 1539 P.S.I.Final Hydrostatic Pressure _____ (H) 2418 P.S.I. 1562

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature]
Signature of Customer or his authorized representativeWestern Representative Brad Borg Thank you.

FIELD INVOICE

Open Hole Test ☒ \$ 700
Misrun \$ _____
Straddle Test \$ _____
Jars ☒ \$ 1225
Selective Zone \$ _____
Safety Joint \$ _____
Standby \$ _____
Evaluation \$ _____
Extra Packer ☒ \$ _____
Circ. Sub ☒ \$ 35
Mileage \$ _____
Fluid Sampler ☒ \$ 200
Extra Charts \$ _____
Insurance \$ _____
Telecopier \$ _____
TOTAL \$ 1160



Fluid Sample Report

Date 4-19-93 Ticket No. 19008
Company Hugoton Energy Corporation
Well Name & No. Love 1-19 DST No. 1
County Stanton State KS
Sampler No. #201 Test Interval 4985 - 5003

Pressure in Sampler 80 PSIG BHT 130 OF

Total Volume of Sampler 2,500^{cc} cc.
Total Volume of Sample: 1,500^{cc} cc.
Oil: — cc.
Water: 1,500^{cc} cc.
Mud: — cc.
Gas: — cu. ft.
Other: —

Resistivity

Water: .060 @ 55°F of Chloride Content 201,300 ppm.
Mud Pit Sample 4.5 @ 55°F of Chloride Content 1,567 ppm.
Gas/Oil Ratio — Gravity — °API @ — OF

Where was sample drained Rig Floor

Remarks: —

WESTERN TESTING CO., INC.

Pressure Data

Date 4-19-52

Test Ticket No. 14008

Recorder No. 1562

Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2446</u> P.S.I.		M
B First Initial Flow Pressure	<u>252</u> P.S.I.		
C First Final Flow Pressure	<u>6232</u> P.S.I.		
D Initial Closed-in Pressure	<u>1540</u> P.S.I.		
E Second Initial Flow Pressure	<u>708</u> P.S.I.		
F Second Final Flow Pressure	<u>1046</u> P.S.I.		
G Final Closed-in Pressure	<u>1550</u> P.S.I.		
H Final Hydrostatic Mud	<u>2412</u> P.S.I.		

Open Tool		M
First Flow Pressure		Mins. <u>30</u> Mins.
Initial Closed-in Pressure		Mins. <u>60</u> Mins.
Second Flow Pressure		Mins. <u>55</u> Mins.
Final Closed-in Pressure		Mins. <u>146</u> Mins.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>252</u>	0	<u>6232</u>	0	<u>708</u>	0	<u>1046</u>
P 2 5	<u>297</u>	3	<u>1286</u>	5	<u>715</u>	3	<u>1377</u>
P 3 10	<u>454</u>	6	<u>1334</u>	10	<u>752</u>	6	<u>1436</u>
P 4 15	<u>515</u>	9	<u>1413</u>	15	<u>796</u>	9	<u>1470</u>
P 5 20	<u>555</u>	12	<u>1443</u>	20	<u>825</u>	12	<u>1482</u>
P 6 25	<u>598</u>	15	<u>1461</u>	25	<u>871</u>	15	<u>1497</u>
P 7 30	<u>6232</u>	18	<u>1477</u>	30	<u>903</u>	18	<u>1504</u>
P 8 35		21	<u>1491</u>	35	<u>936</u>	21	<u>1511</u>
P 9 40		24	<u>1500</u>	40	<u>965</u>	24	<u>1516</u>
P10 45		27	<u>1510</u>	45	<u>993</u>	27	<u>1522</u>
P11 50		30	<u>1516</u>	50	<u>1023</u>	30	<u>1526</u>
P12 55		33	<u>1520</u>	55	<u>1046</u>	33	<u>1528</u>
P13 60		36	<u>1528</u>	60		36	<u>1532</u>
P14 65		39	<u>1531</u>	65		39	<u>1536</u>
P15 70		42	<u>1532</u>	70		42	<u>1538</u>
P16 75		45	<u>1532</u>	75		45	<u>1540</u>
P17 80		48	<u>1534</u>	80		48	<u>1541</u>
P18 85		51	<u>1535</u>	85		51	<u>1542</u>
P19 90		54	<u>1536</u>	90		54	<u>1543</u>
P20 95		57	<u>1538</u>	95		57	<u>1544</u>
100		60	<u>1540</u>	100		60	<u>1545</u>

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 19008

Recorder No. _____ Capacity _____ Location _____ Ft. _____

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud _____ P.S.I.	Open Tool _____ M _____			
B First Initial Flow Pressure _____ P.S.I.	First Flow Pressure _____ Mins. _____ Mins.			
C First Final Flow Pressure _____ P.S.I.	Initial Closed-in Pressure _____ Mins. _____ Mins.			
D Initial Closed-in Pressure _____ P.S.I.	Second Flow Pressure _____ Mins. _____ Mins.			
E Second Initial Flow Pressure _____ P.S.I.	Final Closed-in Pressure _____ Mins. _____ Mins.			
F Second Final Flow Pressure _____ P.S.I.				
G Final Closed-in Pressure _____ P.S.I.				
H Final Hydrostatic Mud _____ P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of _____ mins. and a		of _____ mins. and a		of _____ mins. and a		of _____ mins. and a	
final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 105		63		105		63	1545
P 2 110		66		110		66	
P 3 115		69		115		69	
P 4 120		72		120		72	
P 5 125		75		125		75	1545
P 6 130		78		130		78	1546
P 7 135		81		135		81	1546
P 8 140		84		140		84	1547
P 9 145		87		145		87	1547
P10 150		90		150		90	1548
P11 155		93		155		93	1548
P12 160		96		160		96	1549
P13 165		99		165		99	1549
P14 170		102		170		102	1550
P15 175		105		175		105	1550
P16 180		108		180		108	
P17 185		111		185		111	
P18 190		114		190		114	
P19 195		117		195		117	
P20 200		120		200		120	1550
						122	
						124	1550

DST REPORT

GENERAL INFORMATION

DATE	: 4/19/93	TICKET	: 19008
CUSTOMER	: HUGOTON ENERGY CORP	LEASE	: LOVE
WELL	: #1-19	TEST: 1	GEOLOGIST: ?
ELEVATION	: 3345 GE	FORMATION	: MORROW
SECTION	: 19	TOWNSHIP	: 30S
RANGE	: 40W	STATE	: KS
GAUGE SN#	: 1562	RANGE	: 3900
		CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	4985.00 ft	TO:	5003.00 ft	TVD:	5003.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	4994.0 ft		4997.0 ft		
TEMPERATURE:	130.0				
DRILL COLLAR LENGTH:	629.0 ft	I.D.:		2.250 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	4326.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	30.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	18.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	4980.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	4985.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	MURFIN RIG 21	VISCOSITY :	47.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	7.600 cc
WEIGHT :	9.100 ppg		
CHLORIDES :	950 ppm	SERIAL NUMBER:	405
JARS-MAKE :	WTC	REVERSED OUT?:	YES
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW-BOTTOM OF BUCKET
IN 2 MINUTES. FINAL FLOW PERIOD STRONG BLOW-
BOTTOM OF BUCKET IN 4 MINUTES.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
2065.0	0.0	0.0	100.0	0.0	SALTWATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 122000 PPM

RATE INFORMATION

OIL VOLUME:	0.0000	STB		
GAS VOLUME:	0.0000	SCF		
MUD VOLUME:	0.0000	STB		
WATER VOLUME:	23.2349	STB		
TOTAL FLUID :	23.2349	STB		
			TOTAL FLOW TIME:	85.0000 min.
			AVERAGE OIL RATE:	0.0000 STB/D
			AVERAGE WATER RATE:	393.6272 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2438.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	360.00	619.00
INITIAL SHUT-IN	60.00		1529.00
FINAL FLOW	60.00	708.00	1025.00
FINAL SHUT-IN	120.00		1539.00

FINAL HYDROSTATIC PRESSURE: 2418.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2446.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	352.00	633.00
INITIAL SHUT-IN	60.00		1540.00
FINAL FLOW	55.00	708.00	1046.00
FINAL SHUT-IN	126.00		1550.00

FINAL HYDROSTATIC PRESSURE: 2412.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 4/19/93	TICKET	: 19008
CUSTOMER	: HUGOTON ENERGY CORP	LEASE	: LOVE
WELL	: #1-19	TEST:	1
ELEVATION:	3345 GE	GEOLOGIST:	?
SECTION	: 19	FORMATION:	MORROW
RANGE	: 40W	TOWNSHIP	: 30S
GAUGE SN#:	1562	STATE	: KS
		CLOCK	: 12
	COUNTY: STANTON		
	RANGE : 3900		

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	352.00	352.00
5.00	397.00	45.00
10.00	454.00	57.00
15.00	505.00	51.00
20.00	555.00	50.00
25.00	598.00	43.00
30.00	633.00	35.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	1286.00	1286.00	0.00
6.00	1374.00	88.00	0.00
9.00	1413.00	39.00	0.00
12.00	1443.00	30.00	0.00
15.00	1461.00	18.00	0.00
18.00	1477.00	16.00	0.00
21.00	1491.00	14.00	0.00
24.00	1500.00	9.00	0.00
27.00	1510.00	10.00	0.00
30.00	1516.00	6.00	0.00
33.00	1520.00	4.00	0.00
36.00	1528.00	8.00	0.00
39.00	1531.00	3.00	0.00
42.00	1532.00	1.00	0.00
45.00	1533.00	1.00	0.00
48.00	1534.00	1.00	0.00
51.00	1535.00	1.00	0.00
54.00	1536.00	1.00	0.00
57.00	1538.00	2.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
60.00	1540.00	2.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	708.00	708.00
5.00	715.00	7.00
10.00	752.00	37.00
15.00	796.00	44.00
20.00	835.00	39.00
25.00	871.00	36.00
30.00	903.00	32.00
35.00	936.00	33.00
40.00	965.00	29.00
45.00	993.00	28.00
50.00	1023.00	30.00
55.00	1046.00	23.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	1377.00	1377.00	0.00
6.00	1436.00	59.00	0.00
9.00	1470.00	34.00	0.00
12.00	1483.00	13.00	0.00
15.00	1497.00	14.00	0.00
18.00	1504.00	7.00	0.00
21.00	1511.00	7.00	0.00
24.00	1516.00	5.00	0.00
27.00	1522.00	6.00	0.00
30.00	1526.00	4.00	0.00
33.00	1528.00	2.00	0.00
36.00	1533.00	5.00	0.00
39.00	1536.00	3.00	0.00
42.00	1538.00	2.00	0.00
45.00	1540.00	2.00	0.00
48.00	1541.00	1.00	0.00
51.00	1542.00	1.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
54.00	1543.00	1.00	0.00
57.00	1544.00	1.00	0.00
60.00	1545.00	1.00	0.00
63.00	1545.00	0.00	0.00
66.00	1545.00	0.00	0.00
69.00	1545.00	0.00	0.00
72.00	1545.00	0.00	0.00
75.00	1545.00	0.00	0.00
78.00	1546.00	1.00	0.00
81.00	1546.00	0.00	0.00
84.00	1547.00	1.00	0.00
87.00	1547.00	0.00	0.00
90.00	1548.00	1.00	0.00
93.00	1548.00	0.00	0.00
96.00	1549.00	1.00	0.00
99.00	1549.00	0.00	0.00
102.00	1550.00	1.00	0.00
105.00	1550.00	0.00	0.00
108.00	1550.00	0.00	0.00
111.00	1550.00	0.00	0.00
114.00	1550.00	0.00	0.00
117.00	1550.00	0.00	0.00
120.00	1550.00	0.00	0.00
123.00	1550.00	0.00	0.00
126.00	1550.00	0.00	0.00

FLUID SAMPLE REPORT

GENERAL INFORMATION

DATE	: 4/19/93	TICKET	: 19008
CUSTOMER	: HUGOTON ENERGY CORP	LEASE	: LOVE
WELL	: #1-19	TEST:	1
ELEVATION:	3345 GE	GEOLOGIST:	?
SECTION	: 19	FORMATION:	MORROW
RANGE	: 40W	TOWNSHIP	: 30S
GAUGE SN#:	1562	STATE	: KS
		CLOCK	: 12
	COUNTY:	STANTON	
	RANGE	: 3900	

SAMPLE INFORMATION

PRESSURE IN SAMPLER:	80.00 PSIG	BHT:	130.0 DEG F
TOTAL VOLUME OF SAMPLER:	2500.00 cc		
TOTAL VOLUME OF SAMPLE:	1500.00 cc		
OIL:	0.00 cc		
WATER:	1500.00 cc		
MUD:	0.00 cc		
GAS:	0.00 cc		
OTHER:	0.00 cc		

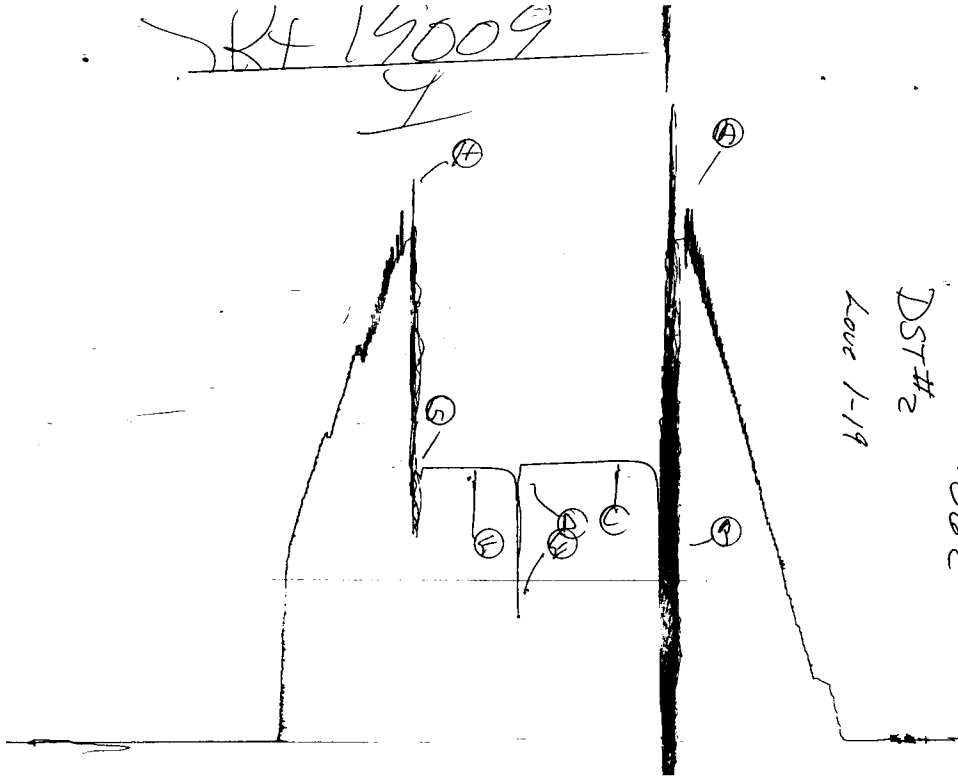
RESISTIVITY

DRILLING MUD:	.060 @ 55 DEGREES F	CHLORIDE CONTENT:	201300.00 ppm
MUD PIT SAMPLE:	4.5 @ 55 DEGREES F	CHLORIDE CONTENT:	1567.00 ppm
GAS/OIL RATIO:		GRAVITY:	
WHERE WAS SAMPLE DRAINED:	RIG FLOOR		
REMARKS:			

SKT 14009
Y

DST #2
Loc 1-19

1562



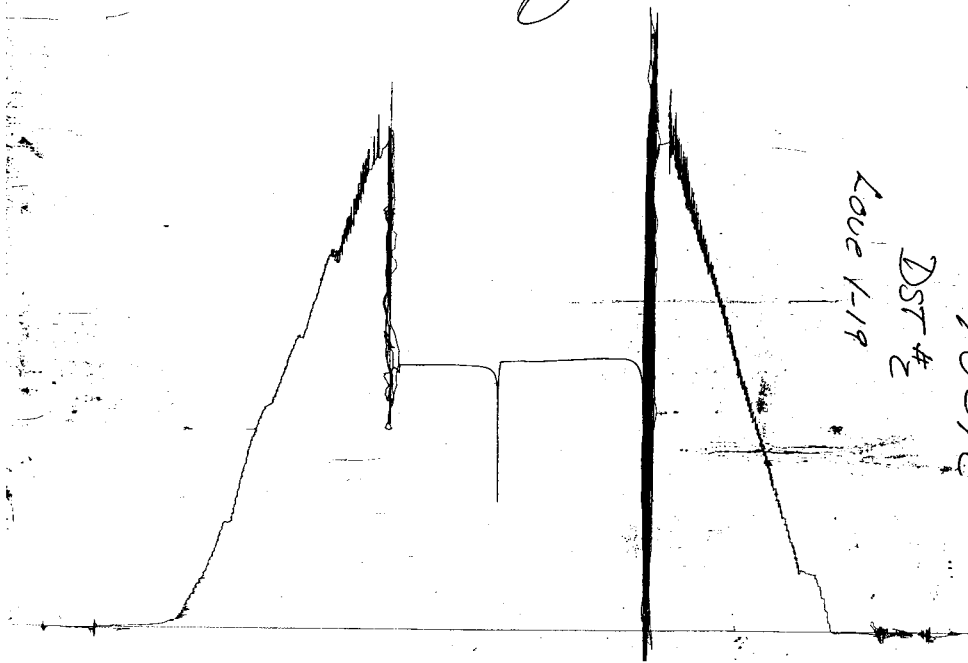
OK 19007

0

Loc 1-19

DST #2

10242





P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N^o 19009

Elevation G.E. 3345 Formation Lower Morrow ^{Snel} Eff. Pay Ft.

District Garden City Date 4-21-93 Customer Order No.

COMPANY NAME Hugoton Energy Corp

ADDRESS 229 E. Williams Suite 500 Wichita KS 67202

LEASE AND WELL NO. Low 1-19 COUNTY Stanton STATE KS Sec. 19 Twp. 32 Rge. 40

Mail Invoice To Same Co. Name Same Address Same No. Copies Requested Reg

Mail Charts To Same #1-19 Address Same No. Copies Requested Reg

Formation Test No. 2 Interval Tested From 5331 ft. to 5346 ft. Total Depth 5346 ft.

Packer Depth 5326 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Packer Depth 5331 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 5338 ft. Recorder Number 1562 Cap. 3900

Bottom Recorder Depth (Outside) 5341 ft. Recorder Number 10242 Cap. 4100

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Martin Daly #21 Drill Collar Length 629' I. D. 2 1/4 in.

Mud Type Chemical Viscosity 44 Weight Pipe Length I. D. in.

Weight 9.0 Water Loss 10.8 cc. Drill Pipe Length 4670' I. D. 3.8 in.

Chlorides 2,200 P.P.M. Test Tool Length 32 ft. Tool Size 5 1/2 OD in.

Jars: Make WTC Serial Number 405 Anchor Length 15 ft. Size 5 1/2 OD in.

Did Well Flow? Reversed Out Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Weak 1" Blow Decreased Dried In 25 min, open 30 min I.F.P.
NO BLOW

Recovered 70' ft. of Drlg mud heavy

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides P.P.M. Sample Jars used Remarks (total Fluid 70')

APR 23 1993

Time On Location 11:00 ^{AM} _{PM} Time Pick Up Tool 12:30 ^{AM} _{PM} Time Off Location ^{AM} _{PM}

Time Set Packer(s) 3:18 ^{AM} _{PM} Time Started Off Bottom 6:18 ^{AM} _{PM} Maximum Temperature 133°F

Initial Hydrostatic Pressure (A) 2577 P.S.I.

Initial Flow Period 30 Minutes (B) 0 P.S.I. to (C) 0 P.S.I.

Initial Closed In Period 60 Minutes (D) 1420 P.S.I.

Final Flow Period 30 Minutes (E) 638 P.S.I. to (F) 638 P.S.I.

Final Closed In Period 60 Minutes (G) 1401 P.S.I.

Final Hydrostatic Pressure (H) 2577 P.S.I. 1562

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Karl A. [Signature]
Signature of Customer or his authorized representative

Western Representative Brad Boy Thank you

FIELD INVOICE

Open Hole Test	\$ <u>1500</u>
Misrun	\$ <u> </u>
Straddle Test	\$ <u> </u>
Jars	\$ <u>225</u>
Selective Zone	\$ <u> </u>
Safety Joint	\$ <u>25</u>
Standby	\$ <u> </u>
Evaluation	\$ <u> </u>
Extra Packer	\$ <u> </u>
Circ. Sub.	\$ <u> </u>
Mileage	\$ <u> </u>
Fluid Sampler	\$ <u>200</u>
Extra Charts	\$ <u> </u>
Insurance	\$ <u> </u>
Telecopier	\$ <u> </u>
TOTAL	\$ <u>950</u>



Fluid Sample Report

Date 4-21-93 Ticket No. 19009
 Company Hugoton Energy,
 Well Name & No. Love 1-19 DST No. 2
 County Stanton State Ks
 Sampler No. 201 Test Interval 5331- 5346

Pressure in Sampler _____ PSIG BHT _____ OF

Total Volume of Sampler 2500 cc.

Total Volume of Sample: 2500 cc.

Oil: _____ cc.

Water: _____ cc.

Mud: Heavy mud cc.

Gas: _____ cu. ft.

Other: _____

Resistivity

Water: _____ @ _____ of Chloride Content _____ ppm.

Mud Pit Sample 1.3 @ 90°F of Chloride Content 3,600 ppm.

Gas/Oil Ratio _____ Gravity _____ °API @ _____ OF

Where was sample drained Rig Floor

Remarks: _____

Chlorides w/ Chemical =

WESTERN TESTING CO., INC.

Pressure Data

Date 4-21-92 Test Ticket No. 15009
 Recorder No. 1565 Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2581</u> P.S.I.		
B First Initial Flow Pressure	<u>1157</u> P.S.I.		
C First Final Flow Pressure	<u>1451</u> P.S.I.		
D Initial Closed-in Pressure	<u>1451</u> P.S.I.		
E Second Initial Flow Pressure	<u>1046</u> P.S.I.		
F Second Final Flow Pressure	<u>1414</u> P.S.I.		
G Final Closed-in Pressure	<u>1392</u> P.S.I.		
H Final Hydrostatic Mud	<u>2572</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>1157</u>	0	<u>1451</u>	0	<u>1046</u>	0	<u>1414</u>
P 2 5	<u>1414</u>	3	<u>1450</u>	5	<u>1377</u>	3	
P 3 10	<u>1436</u>	6	<u>1448</u>	10	<u>1400</u>	6	
P 4 15	<u>1446</u>	9	<u>1448</u>	15	<u>1410</u>	9	
P 5 20	<u>1450</u>	12	<u>1447</u>	20	<u>1414</u>	12	
P 6 25	<u>1450</u>	15	<u>1446</u>	25	<u>5</u>	15	<u>1414</u>
P 7 30	<u>1451</u>	18	<u>1445</u>	30	<u>1414</u>	18	
P 8 35		21	<u>1444</u>	35		21	
P 9 40		24	<u>1442</u>	40		24	
P10 45		27	<u>1442</u>	45		27	
P11 50		30	<u>1441</u>	50		30	<u>1414</u>
P12 55		33	<u>1441</u>	55		33	
P13 60		36	<u>1441</u>	60		36	
P14 65		39	<u>1440</u>	65		39	<u>1414</u>
P15 70		42	<u>1440</u>	70		42	<u>1387</u>
P16 75		45	<u>1439</u>	75		45	<u>1387</u>
P17 80		48	<u>1438</u>	80		48	<u>1387</u>
P18 85		51	<u>1438</u>	85		51	
P19 90		54	<u>1437</u>	90		54	
P20 95		57	<u>1436</u>	95		57	
100		60	<u>1435</u>	100		60	

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 19209

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud _____ P.S.I.	Open Tool _____		M _____	
B First Initial Flow Pressure _____ P.S.I.	First Flow Pressure _____		Mins. _____	Mins. _____
C First Final Flow Pressure _____ P.S.I.	Initial Closed-in Pressure _____		Mins. _____	Mins. _____
D Initial Closed-in Pressure _____ P.S.I.	Second Flow Pressure _____		Mins. _____	Mins. _____
E Second Initial Flow Pressure _____ P.S.I.	Final Closed-in Pressure _____		Mins. _____	Mins. _____
F Second Final Flow Pressure _____ P.S.I.				
G Final Closed-in Pressure _____ P.S.I.				
H Final Hydrostatic Mud _____ P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of _____ mins. and a		of _____ mins. and a		of _____ mins. and a		of _____ mins. and a	
final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 105		63	<u>14.34</u>	105		63	
P 2 110		66	<u>14.33</u>	110		66	
P 3 115		69	<u>14.32</u>	115		69	
P 4 120		72	<u>14.31</u>	120		72	
P 5 125		75		125		75	
P 6 130		78		130		78	
P 7 135		81		135		81	
P 8 140		84		140		84	
P 9 145		87		145		87	
P10 150		90		150		90	
P11 155		93		155		93	
P12 160		96		160		96	
P13 165		99		165		99	
P14 170		102		170		102	
P15 175		105		175		105	
P16 180		108		180		108	
P17 185		111		185		111	
P18 190		114		190		114	
P19 195		117		195		117	
P20 200		120		200		120	

DST REPORT

GENERAL INFORMATION

DATE	: 4/21/93	TICKET	: 19009
CUSTOMER	: HUGOTON ENERGY CORP	LEASE	: LOVE
WELL	: #1-19	TEST:	2
ELEVATION	: 3345 GE	GEOLOGIST	: ?
SECTION	: 19	FORMATION	: LOWER MORROW SAND
RANGE	: 40W	TOWNSHIP	: 30S
Gauge SN#	: 1562	STATE	: KS
	COUNTY: STANTON	CLOCK	: 12
	RANGE : 3900		

WELL INFORMATION

PERFORATION INTERVAL FROM:	5331.00 ft	TO:	5346.00 ft	TVD:	5346.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	5338.0 ft		5341.0 ft		
TEMPERATURE:	133.0				
DRILL COLLAR LENGTH:	629.0 ft	I.D.:		2.250 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	4670.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	32.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	15.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	5326.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	5331.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	MURFIN RIG 21	VISCOSITY :	44.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	10.800 cc
WEIGHT :	9.000 ppg		
CHLORIDES :	2200 ppm	SERIAL NUMBER:	405
JARS-MAKE :	WTC	REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK 1 INCH BLOW-DECREASED
AND DIED IN 25 MINUTES. FINAL FLOW PERIOD NO BLOW

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
70.0	0.0	0.0	0.0	100.0	DRILLING HEAVY MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	60.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.3442	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.3442	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2577.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	0.00	0.00
INITIAL SHUT-IN	60.00		1420.00
FINAL FLOW	30.00	638.00	638.00
FINAL SHUT-IN	60.00		1401.00

FINAL HYDROSTATIC PRESSURE: 2577.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2581.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	1157.00	1451.00
INITIAL SHUT-IN	72.00		1431.00
FINAL FLOW	30.00	646.00	1414.00
FINAL SHUT-IN	48.00		1393.00

FINAL HYDROSTATIC PRESSURE: 2573.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 4/21/93	TICKET : 19009
CUSTOMER : HUGOTON ENERGY CORP	LEASE : LOVE
WELL : #1-19 TEST: 2	GEOLOGIST: ?
ELEVATION: 3345 GE	FORMATION: LOWER MORROW SAND
SECTION : 19	TOWNSHIP : 30S
RANGE : 40W COUNTY: STANTON	STATE : KS
GAUGE SN#: 1562 RANGE : 3900	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	1157.00	1157.00
5.00	1413.00	256.00
10.00	1436.00	23.00
15.00	1446.00	10.00
20.00	1450.00	4.00
25.00	1450.00	0.00
30.00	1451.00	1.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	1450.00	1450.00	0.00
6.00	1448.00	-2.00	0.00
9.00	1448.00	0.00	0.00
12.00	1447.00	-1.00	0.00
15.00	1446.00	-1.00	0.00
18.00	1445.00	-1.00	0.00
21.00	1444.00	-1.00	0.00
24.00	1443.00	-1.00	0.00
27.00	1442.00	-1.00	0.00
30.00	1442.00	0.00	0.00
33.00	1441.00	-1.00	0.00
36.00	1441.00	0.00	0.00
39.00	1440.00	-1.00	0.00
42.00	1440.00	0.00	0.00
45.00	1439.00	-1.00	0.00
48.00	1439.00	0.00	0.00
51.00	1438.00	-1.00	0.00
54.00	1437.00	-1.00	0.00
57.00	1436.00	-1.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
60.00	1435.00	-1.00	0.00
63.00	1434.00	-1.00	0.00
66.00	1433.00	-1.00	0.00
69.00	1432.00	-1.00	0.00
72.00	1431.00	-1.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	646.00	646.00
5.00	1377.00	731.00
10.00	1400.00	23.00
15.00	1410.00	10.00
20.00	1414.00	4.00
25.00	1414.00	0.00
30.00	1414.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	1414.00	1414.00	0.00
6.00	1414.00	0.00	0.00
9.00	1414.00	0.00	0.00
12.00	1414.00	0.00	0.00
15.00	1414.00	0.00	0.00
18.00	1414.00	0.00	0.00
21.00	1414.00	0.00	0.00
24.00	1414.00	0.00	0.00
27.00	1414.00	0.00	0.00
30.00	1414.00	0.00	0.00
33.00	1414.00	0.00	0.00
36.00	1414.00	0.00	0.00
39.00	1414.00	0.00	0.00
42.00	1348.00	-66.00	0.00
45.00	1387.00	39.00	0.00
48.00	1393.00	6.00	0.00

FLUID SAMPLE REPORT

GENERAL INFORMATION

DATE	: 4/21/93	TICKET	: 19009
CUSTOMER	: HUGOTON ENERGY CORP	LEASE	: LOVE
WELL	: #1-19	TEST: 2	GEOLOGIST: ?
ELEVATION	: 3345 GE	FORMATION	: LOWER MORROW SAND
SECTION	: 19	TOWNSHIP	: 30S
RANGE	: 40W	COUNTY: STANTON	STATE : KS
GAUGE SN#	: 1562	RANGE : 3900	CLOCK : 12

SAMPLE INFORMATION

PRESSURE IN SAMPLER:	0.00 PSIG	BHT:	0.0 DEG F
TOTAL VOLUME OF SAMPLER:	2500.00 cc		
TOTAL VOLUME OF SAMPLE:	2500.00 cc		
OIL:	0.00 cc		
WATER:	0.00 cc		
MUD:	0.00 cc		
GAS:	0.00 cc		
OTHER:	0.00 cc		

RESISTIVITY

DRILLING MUD:	CHLORIDE CONTENT:	0.00 ppm
MUD PIT SAMPLE: 1.3 @ 90 DEGREES F	CHLORIDE CONTENT:	3600.00 ppm
GAS/OIL RATIO:	GRAVITY:	
WHERE WAS SAMPLE DRAINED: RIG FLOOR		
REMARKS:		